ABSTRACT

When connecting a unit to one or more existing ad hoc wireless networks comprising several units, the units e.g. adapted to communicate according to the Bluetooth specification and the network then being formed according to the same specification to comprise one or more piconets, a unit can discover the units which are the masters in the networks, and then connect as a slave to those masters. Specifically it does not have to use the master-slave switch according to the Bluetooth specification. In the first stage of the unit trying to make a connection it establishes contact with at least one unit in an existing ad hoc network and then additional information on the status, in particular the role of master or slave, of the unit already connected in the network is transferred to the not yet connected unit. This information facilitates the decision of the unconnected unit as to which unit in the network that it should try to connect to. Then, in the actual connecting of the unit to the network, the roles of the unit and of the already connected unit can be chosen by the unit wanting to be connected. In particular, the initially inquiring and paging unit may become a slave unit in a newly formed piconet or in an already existing piconet.

(Fig. 7)